| ٠ | A 1692 |
|--------|---|
| | CRF Errors Corrected by the STIC Systems Branch CRF Processing Date: 2/472 |
| | CRF Processing Date: 2/4/2006 Changed a file from non-ASCII to ASCII CRF Processing Date: 2/4/2006 Edited by: Petified by: (SPIC) |
| | Changed a file from non-ASCII to ASCII ENTERE Edited by: (SPC) |
| • | Changed the margins in cases where the sequence text was "wrapped" down to the next line. |
| | Edited a format error in the Current Application Data section, specifically: |
| | Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other |
| F | Added the mandatory heading and subheadings for "Current Application Data". |
| E | Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer. |
| c _ | Changed the spelling of a mandatory field (the headings or subheadings), specifically: |
| (| Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: |
| lı | nserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: |
| | Corrected subheading placement. All responses must be on the same line as each subheading. If the pplicant placed a response below the subheading, this was moved to its appropriate place. |
| ı | Inserted colons after headings/subheadings. Headings edited included: |
| [| Deleted extra, invalid, headings used by an applicant, specifically: |
| - | Deleted: non-ASCII "garbage" at the beginning/end of files; secretary initials/filename at end of page numbers throughout text; other invalid text, such as |
| | Inserted mandatory headings, specifically: |
| | Corrected an obvious error in the response, specifically: |
| | Edited identifiers where upper case is used but lower case is required, or vice versa. |
| | Corrected an error in the Number of Sequences field, specifically: |
| | A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted. |
| | releted <i>ending</i> stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (erroue to a Patentin bug). Sequences corrected: |
| | Other: Seg 20-corrected amend and nos. |

^{*}Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95



1600

RAW SEQUENCE LISTING DATE: 02/04/2002 PATENT APPLICATION: US/09/242,202B TIME: 20:54:32

Input Set : N:\Crf3\01242002\I242202B.raw
Output Set: N:\CRF3\02042002\I242202B.raw

SEQUENCE LISTING

1 (1) GENERAL INFORMATION:

```
2
             (i) APPLICANT: Nelson, Edward L.
      3
                             Nelson, Peter J.
      4
            (ii) TITLE OF INVENTION: NOVEL VECTOR FOR
      5
                                      POLYNUCLEOTIDE VACCINES
      6
           (iii) NUMBER OF SEQUENCES: 29
      7
            (iv) CORRESPONDENCE ADDRESS:
      8
                  (A) ADDRESSEE: MORGAN & FINNEGAN, L.L.P.
      9
                  (B) STREET: 345 PARK AVENUE
     10
                  (C) CITY: NEW YORK
                  (D) STATE: NEW YORK
     11
     12
                  (E) COUNTRY: USA
     13
                  (F) ZIP: 10154
             (V) COMPUTER READABLE FORM:
     14
                  (A) MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB
     16
                  (B) COMPUTER: IBM PC COMPATIBLE
     17
                  (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     18
                  (D) SOFTWARE: MS WORD 97
     19
            (vi) CURRENT APPLICATION DATA:
C--> 20
                  (A) APPLICATION NUMBER: US/09/242,202B
C--> 21
                  (B) FILING DATE: 01-Nov-1999
     22
           (vii) PRIOR APPLICATION DATA:
     23
                  (A) APPLICATION NUMBER: US60/023931
     24
                  (B) FILING DATE: 14-AUG-1996
     25
          (viii) ATTORNEY/AGENT INFORMATION:
     26
                  (A) NAME: KATHRYN M. BROWN
     27
                  (B) REGISTRATION NUMBER: 34556
     28
                  (C) REFERENCE/DOCKET NUMBER: 2026-4236US1
     29
            (ix) TELECOMMUNICATION INFORMATION:
     30
                  (A) TELEPHONE: (212) 758-4800
     31
                  (B) TELEFAX: (212) 751-6849
                  (C) TELEX: 421792
     33 (2) INFORMATION FOR SEQ ID NO: 1:
     34
             (i) SEQUENCE CHARACTERISTICS:
     35
                  (A) LENGTH: 453 base pairs
     36
                  (B) TYPE: nucleic acid
     37
                  (C) STRANDEDNESS: single
     38
                  (D) TOPOLOGY: unknown
     39
            (ii) MOLECULE TYPE: cDNA
           (iii) HYPOTHETICAL: No
     40
     41
            (iv) ANTI-SENSE: No
     42
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
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DATE: 02/04/2002 PATENT APPLICATION: US/09/242,202B TIME: 20:54:32

Input Set : N:\Crf3\01242002\I242202B.raw
Output Set: N:\CRF3\02042002\I242202B.raw

| 43 | GGCCGCGTTG CTGGCGTTTT TCCATAGGCT | | 40 |
|-----|-----------------------------------|------------|-----|
| 44 | GACGAGCATC ACAAAAATCG ACGCTCAAGT | | 80 |
| 45 | GAAACCCGAC AGGACTATAA AGATACCAGG | | 120 |
| 46 | TGGAAGCTCC CTCGTGCGCT CTCCTGTTCC | | 160 |
| 47 | CTTACCGGAT ACCTCTCCGC CTTTCTCCCT | TCGGGAAGCG | 200 |
| 48 | TGGCGCTTTC TCAATGCTCA CGCTGTAGGT | ATCTCAGTTC | 240 |
| 49 | GGTGTAGGTC GTTCGCTCCA AGCTGGGCTG | | 280 |
| 50 | CCCCCGTTC AGCCCGACCG CTGCGCCTTA | TCCGGTAACT | 320 |
| 51 | ATCGTCTTGA GTCCAACCCG GTAAGACACG | ACTTATCGCC | 360 |
| 52 | ACTGGCAGCA GCCACTGGTA ACAGGATTAG | CAGAGCGAGG | 400 |
| 53 | TATGTAGGCG GTGCTACAGA GTTCTTGAAG | TGGTGGCCTA | 440 |
| 54 | ACTACGGCTA CAC | • | 453 |
| 56 | (2) INFORMATION FOR SEQ ID NO: 2: | | |
| 57 | (i) SEQUENCE CHARACTERISTICS: | | |
| 58 | (A) LENGTH: 453 base pairs | | |
| 59 | (B) TYPE: nucleic acid | | |
| 60 | (C) STRANDEDNESS: single | | |
| 61 | (D) TOPOLOGY: unknown | | |
| 62 | (ii) MOLECULE TYPE: cDNA | | |
| 63 | (iii) HYPOTHETICAL: No | | |
| 64 | (iv) ANTI-SENSE: NO | | |
| 65 | (xi) SEQUENCE DESCRIPTION: SEQ ID | NO: 2: | |
| 66 | GTGTAGCCGT AGTTAGGCCA CCACTTCAAG | AACTCTGTAG | 40 |
| 67 | CACCGCCTAC ATACCTCGCT CTGCTAATCC | TGTTACCAGT | 80 |
| 68 | GGCTGCTGCC AGTGGCGATA AGTCGTGTCT | TACCGGGTTG | 120 |
| 69 | GACTCAAGAC GATAGTTACC GGATAAGGCG | | 160 |
| 70 | GCTGAACGGG GGGTTCGTGC ACACAGCCCA | | 200 |
| 71 | AACGACCTAC ACCGAACTGA GATACCTACA | | 240 |
| 72 | TGAGAAAGCG CCACGCTTCC CGAAGGGAGA | · | 280 |
| 73 | GGTATCCGGT AAGCGGCAGG GTCGGAACAG | | 320 |
| 74 | GAGGGAGCTT CCAGGGGGAA ACGCCTGGTA | | 360 |
| 75 | CCTGTCGGGT TTCGCCACCT CTGACTTGAG | | 100 |
| 76 | TGTGATGCTC GTCAGGGGGG CGGAGCCTAT | | 140 |
| 77 | CAGCAACGCG GCC | | 153 |
| 79 | (2) INFORMATION FOR SEQ ID NO: 3: | · | |
| 80 | (i) SEQUENCE CHARACTERISTICS: | | |
| 81 | (A) LENGTH: 209 base pairs | | |
| 82 | (B) TYPE: nucleic acid | | |
| 83 | (C) STRANDEDNESS: single | | |
| 84 | (D) TOPOLOGY: unknown | | |
| 85 | (ii) MOLECULE TYPE: cDNA | | |
| 86 | (iii) HYPOTHETICAL: NO | | |
| 87 | (iv) ANTI-SENSE: No | | |
| 88 | (xi) SEQUENCE DESCRIPTION: SEQ ID | NO: 3: | |
| 89 | GAATTCTTTC GGACTTTTGA AAGTGATGGT | | 40 |
| 90 | GGATTCGAAC CTTCGAAGTC GATGACGGCA | | 80 |
| 91 | CTGCTCCCTT TGGCCGCTCG GGAACCCCAC | | 120 |
| 92 | GCTTTTACTG GCCTGCTCCC TTATCGGGAA | | 160 |
| 93 | TCATATCAAA TGACGCGCCG CTGTAAAGTG | | 200 |
| , , | TONINI TONCOCOCCO CIGINANGIO | IIncollund | |

PATENT APPLICATION: US/09/242,202B

DATE: 02/04/2002 TIME: 20:54:32

Input Set : N:\Crf3\01242002\I242202B.raw
Output Set: N:\CRF3\02042002\I242202B.raw

| 94 AAAGAATTC 209 | a |
|--|-----|
| 96 (2) INFORMATION FOR SEQ ID NO: 4: | , |
| 97 (i) SEQUENCE CHARACTERISTICS: | |
| 98 (A) LENGTH: 209 base pairs | |
| 99 (B) TYPE: nucleic acid | |
| 100 (C) STRANDEDNESS: single | |
| 101 (D) TOPOLOGY: unknown | |
| 102 (ii) MOLECULE TYPE: CDNA | |
| 103 (iii) HYPOTHETICAL: No | |
| 104 (iv) ANTI-SENSE: No | |
| 105 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4: | |
| 100 | 4.0 |
| 107 | 40 |
| 100 | 80 |
| 100 | 20 |
| | 60 |
| | 00 |
| | 09 |
| 113 (2) INFORMATION FOR SEQ ID NO: 5: | |
| 114 (i) SEQUENCE CHARACTERISTICS: | |
| 115 (A) LENGTH: 6 base pairs | |
| 116 (B) TYPE: nucleic acid | |
| 117 (C) STRANDEDNESS: single | |
| 118 (D) TOPOLOGY: unknown | |
| 119 (ii) MOLECULE TYPE: cDNA | |
| 120 (iii) HYPOTHETICAL: No | |
| 121 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5: | |
| 122 AATAAA | 6 |
| 124 (2) INFORMATION FOR SEQ ID NO: 6: | |
| 125 (i) SEQUENCE CHARACTERISTICS: | |
| 126 (A) LENGTH: 6 base pairs | |
| 127 (B) TYPE: nucleic acid | |
| 128 (C) STRANDEDNESS: single | |
| 129 (D) TOPOLOGY: unknown | |
| 130 (ii) MOLECULE TYPE: cDNA | |
| 131 (iii) HYPOTHETICAL: No | |
| 132 (iv) ANTI-SENSE: No | |
| 133 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6: | |
| 134 ATTAAA | 6 |
| 136 (2) INFORMATION FOR SEQ ID NO: 7: | |
| (i) SEQUENCE CHARACTERISTICS: | |
| 138 (A) LENGTH: 6 base pairs | |
| 139 (B) TYPE: nucleic acid | |
| 140 (C) STRANDEDNESS: single | |
| 141 (D) TOPOLOGY: unknown | |
| 142 (ii) MOLECULE TYPE: cDNA | |
| 143 (iii) HYPOTHETICAL: No | |
| 144 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7: | |
| 145 AGTAAA | 6 |
| 147 (2) INFORMATION FOR SEQ ID NO: 8: | |

DATE: 02/04/2002 PATENT APPLICATION: US/09/242,202B TIME: 20:54:32

Input Set : N:\Crf3\01242002\I242202B.raw
Output Set: N:\CRF3\02042002\I242202B.raw

| 148 | (i) SEQUENCE CHARACTERISTICS: | |
|-----|---|-----|
| 149 | (A) LENGTH: 6 base pairs | |
| 150 | (B) TYPE: nucleic acid | |
| 151 | (C) STRANDEDNESS: single | |
| 152 | (D) TOPOLOGY: unknown | |
| 153 | (ii) MOLECULE TYPE: cDNA | |
| 154 | (iii) HYPOTHETICAL: No | |
| 155 | (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8: | |
| 156 | AAGAAC | 6 |
| 158 | (2) INFORMATION FOR SEQ ID NO: 9: | |
| 159 | (i) SEQUENCE CHARACTERISTICS: | |
| 160 | (A) LENGTH: 6 base pairs | |
| 161 | (B) TYPE: nucleic acid | |
| 162 | (C) STRANDEDNESS: single | |
| 163 | (D) TOPOLOGY: unknown | |
| 164 | (ii) MOLECULE TYPE: cDNA | |
| 165 | (iii) HYPOTHETICAL: No | |
| 166 | | |
| 167 | (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9: | |
| 168 | AATACA | 6 |
| 170 | (2) INFORMATION FOR SEQ ID NO: 10: | |
| 171 | (i) SEQUENCE CHARACTERISTICS: | |
| 172 | (A) LENGTH: 227 base pairs | |
| 173 | (B) TYPE: nucleic acid | |
| 174 | (C) STRANDEDNESS: single | |
| 175 | (D) TOPOLOGY: unknown | |
| 176 | (ii) MOLECULE TYPE: cDNA | |
| 177 | (iii) HYPOTHETICAL: No | |
| 178 | | |
| 179 | (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10: | |
| 180 | GCCTTAAGGG CCATATGGTG AGTGGATCCC TTGACCCCAG | 40 |
| 181 | GCGGGGATGG GGAGACCTGT AGTCAGAGCC CCCGGGCAGC | 80 |
| 182 | ACAGGCCAAT GCCCGTCCTT CCCCTGCAGG ATGAGTAGTG | 120 |
| 183 | AGTGCCTCTC CTGGCCCTGG AAGTTGCCAC TCCAGTGCCC | 160 |
| 184 | ACCAGCCTTG TCCTAATAAA ATTAAGTTGC ATCATTTTGT | 200 |
| 185 | CTGACTAGGT GTCCTCTATA ATATTAT | 227 |
| 187 | (2) INFORMATION FOR SEQ ID NO: 11: | |
| 188 | (i) SEQUENCE CHARACTERISTICS: | |
| 189 | (A) LENGTH: 227 base pairs | |
| 190 | (B) TYPE: nucleic acid | |
| 191 | (C) STRANDEDNESS: single | |
| 192 | (D) TOPOLOGY: unknown | |
| 193 | (ii) MOLECULE TYPE: cDNA | |
| 194 | , , | |
| 195 | (iv) ANTI-SENSE: No | |
| 196 | (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11: | |
| 197 | | 40 |
| 198 | ACTTAATTTT ATTAGGACAA GGCTGGTGGG CACTGGAGTG | 80 |
| 199 | GCAACTTCCA GGGCCAGGAG AGGCACTCAC TACTCATCCT | 120 |

DATE: 02/04/2002 PATENT APPLICATION: US/09/242,202B TIME: 20:54:32

Input Set : N:\Crf3\01242002\I242202B.raw Output Set: N:\CRF3\02042002\1242202B.raw

| 205 (i) SEQUENCE CHARACTERISTICS: 206 (A) LENGTH: 252 base pairs 207 (B) TYPE: nucleic acid 208 (C) STRANDEDNESS: single 209 (D) TOPOLOGY: unknown 210 (ii) MOLECULE TYPE: CDNA 211 (iii) HYPOTHETICAL: NO 212 (iv) ANTI-SENSE: NO 213 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12: 214 CCTCGGTACC TGCCATGGGG CGGATTCTTT ATCACTGATA 40 215 AGTTGGTGGA CATATTATCT TTATCAGTGA TAAAGTGTCA 80 216 AGCATGACAA AGTTGCAGGC GGATACAGTGA ACGGTCTGAC 120 217 GCCCTGGGAC GTGTGAAGGAG GTCGGGGTGA ACGGTCTGAC 160 218 GACACGAAA CTGGCGGGAGA CGGTGTGACGGG 200 219 GCGCTTACT GGCACTTCAG GAACAAGCGG GCCCCTTGAC 252 220 GGCCATATGC CG 252 221 (INFORMATION FOR SEQ ID NO: 13: 223 (i) SEQUENCE CHARACTERISTICS: 224 (A) LENGTH: 35 base pairs 225 (B) TYPE: nucleic acid 226 (C) STRANDEDNESS: single 227 (D) TOPOLOGY: unknown 228 (ii) MOLECULE TYPE: CDNA 230 (iv) ANTI-SENSE: NO 231 (xi) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 240 (I) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 240 (II) MOLECULE TYPE: CDNA 241 (II) MOLECULE TYPE: CDNA 242 (II) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 240 (II) MOLECULE TYPE: CDNA 241 (III) MYPOTHETICAL: NO 242 (II) MOLECULE TYPE: CDNA 243 (II) SEQUENCE CHARACTERISTICS: 244 (III) MYPOTHETICAL: NO 245 (II) SEQUENCE CHARACTERISTICS: 246 (II) MOLECULE TYPE: CDNA 247 (II) MOLECULE TYPE: CDNA 248 (III) MYPOTHETICAL: NO 249 (III) MYPOTHETICAL: NO 240 (III) MYPOTHETICAL: NO 241 (III) MYPOTHETICAL: NO 242 (III) MYPOTHETICAL: NO 243 (III) MYPOTHETICAL: NO 244 (III) MYPOTHETICAL: NO 245 (III) SEQUENCE CHARACTERISTICS: 246 (III) SEQUENCE CHARACTERISTICS: 247 (III) SEQUENCE CHARACTERISTICS: 248 (III) SEQUENCE CHARACTERISTICS: 249 (III) SEQUENCE CHARACTERISTICS: 240 (III) MYPOTHETICAL: NO 241 (III) MYPOTHETICAL: NO 242 (III) SEQUENCE CHARACTERISTICS: 246 (III) SEQUENCE CHARACTERISTICS: 247 (III) SEQUENCE CHARACTERISTICS: 248 (III) SEQUENCE CHAR | 200 GCAGGGAAG GACGGCATT GGCCTGTGCT GCCCGGGGGC 201 TCTGACTACA GGTCTCCCCC ATCCCCGCCT GGGGTCAAGG 202 CATCCACTCA CCATATGGCC CTTAAGG 204 (2) INFORMATION FOR SEQ ID NO: 12: | 160 200 227 |
|--|--|-------------------|
| 207 | · · | |
| C | | |
| 209 (D) TOPOLOGY: unknown 210 (ii) MOLECULE TYPE: cDNA 211 (iii) HYPOTHETICAL: NO 212 (iv) ANTI-SENSE: NO 213 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12: 214 CCTCGGTACC TCCCATGGCG CGGATTCTTT ATCACTGATA 40 215 AGTTGGTGGA CATATTATGT TTATCAGTGA TANAGTGTCA 80 216 AGCATGACA AGTTGCAGCC GGATTACTT ATCACTGATA 160 217 GCCCTGGACT GTTGAACGAG GTCGGCGTAG ACGGTCTGAC 160 218 GCACAGCAAA CTGGCGGAC GGTCGGCGTAG ACGGTCTGAC 160 219 GCCCTTACT GGCACTTCAG GAACAAGCGG GCGCCCTAAG 252 220 (2) INFORMATION FOR SEQ ID NO: 13: 223 (i) SEQUENCE CHARACTERISTICS: 24 (A) LENGTH: 35 base pairs 25 (B) TYPE: nucleic acid 26 (C) STRANDEDNESS: single 27 (D) TOPOLOGY: unknown 28 (ii) MOLECULE TYPE: CDNA 29 (iii) HYPOTHETICAL: NO 210 (xi) SEQUENCE CHARACTERISTICS: 211 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13: 212 (CTCGGTACC TGCCACCTAG GGCGGATC TTAT 35 234 (2) INFORMATION FOR SEQ ID NO: 14: 235 (1) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 36 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 249 (D) TOPOLOGY: unknown 240 (ii) MOLECULE TYPE: cDNA 241 (iii) HYPOTHETICAL: NO 242 (iv) ANTI-SENSE: NO 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 (CGCCATATGG CCTCAAGCGCGTATC TCCACAGTG GGCGGATC TTAT 35 245 (3) LENGTH: 38 base pairs 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 248 (ii) MOLECULE TYPE: cDNA 249 (iii) MOLECULE TYPE: cDNA 240 (iii) MOLECULE TYPE: cDNA 241 (iii) HYPOTHETICAL: NO 242 (iv) ANTI-SENSE: NO 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 (CGCCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 38 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single 260 (C) STRANDEDNESS: single 261 (C) STRANDEDNESS: single 2625 (C) STRANDEDNESS: single 2636 (C) STRANDEDNESS: single | | |
| 11 | | |
| | | |
| 1 | | |
| 213 | | |
| 14 | | |
| 215 AGTTGGTGGA CATATTATGT TTATCAGTGA TAAAGTGTCA 216 AGCATGACAA AGTTGCAGCC GAATACAGTG ATCCGTGCCG 217 GCCCTGGACAT GATGAACGAG GTCGGCGTAGA ACGGTCTGAC 218 GACACGCAAA CTGGCGGAAC GGTTGGGGGT GCAGCAGCCG 219 GCCCTTACT GCACTCTAG GAACAACGG GCGCCTTAAG 220 GGCCATTACT GCACTCTAG GAACAACGG GCGCCTTAAG 240 GGCCATTACT GCACTCTAG GAACAACGG GCGCCTTAAG 252 (2) INFORMATION FOR SEQ ID NO: 13: 223 (i) SEQUENCE CHARACTERISTICS: 224 (A) LENGTH: 35 base pairs 225 (B) TYPE: nucleic acid 226 (C) STRANDEDNESS: single 227 (D) TOPOLOGY: unknown 228 (ii) MOLECULE TYPE: cDNA 229 (iii) HYPOTHETICAL: NO 230 (iv) ANTI-SENSE: NO 231 (xi) SEQUENCE DESCRIFTION: SEQ ID NO: 13: 232 CCTCGGTACC TGCCACCATG GCGCGGATTC TTTAT 35 234 (2) INFORMATION FOR SEQ ID NO: 14: 235 (i) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 239 (D) TOPOLOGY: unknown 240 (ii) MOLECULE TYPE: cDNA 241 (iii) HYPOTHETICAL: NO 242 (iv) ANTI-SENSE: NO 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 (GGCATATGG CCTAAGGGG CCCCGTTGTT CCTGAAGT 38 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | 213 (X1) SEQUENCE DESCRIPTION: SEQ ID NO. 12. | 40 |
| 216 | | |
| 217 GCCCTGGACT GTTGAACGAG GTCGGCGTAG ACGGTCTGAC 218 GACACGCAAA CTGGCGGAAC GGTTGGGGGT GCAGCAGCCG 219 GCGCTTACT GGCACTTCAG GAACAAGCGG GCGCCTTAAG 220 GGCCATATGC CG 252 222 (2) INFORMATION FOR SEQ ID NO: 13: 223 (i) SEQUENCE CHARACTERISTICS: 224 (A) LENGTH: 35 base pairs 225 (B) TYPE: nucleic acid 226 (C) STRANDEDNESS: single 227 (D) TOPOLOGY: unknown 228 (ii) MOLECULE TYPE: cDNA 229 (iii) HYPOTHETICAL: No 230 (iv) ANTI-SENSE: No 231 (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13: 232 CCTCGGTACC TGCCACCATG GCGCGGATTC TTTAT 35 234 (2) INFORMATION FOR SEQ ID NO: 14: 235 (i) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 239 (D) TOPOLOGY: unknown 240 (ii) MOLECULE TYPE: cDNA 241 (iii) HYPOTHETICAL: No 242 (iv) ANTI-SENSE: No 243 (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 CGGCATAGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 245 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | |
| 218 | | 160 |
| 219 | | 200 |
| 252 222 (2) INFORMATION FOR SEQ ID NO: 13: 223 | | 240 |
| 222 (2) INFORMATION FOR SEQ ID NO: 13: 223 | | 252 |
| 224 (A) LENGTH: 35 base pairs 225 (B) TYPE: nucleic acid 226 (C) STRANDEDNESS: single 227 (D) TOPOLOGY: unknown 228 (ii) MOLECULE TYPE: cDNA 229 (iii) HYPOTHETICAL: NO 230 (iv) ANTI-SENSE: NO 231 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13: 232 CCTCGGTACC TGCCACCATG GCGCGGATTC TTTAT 235 (i) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 239 (D) TOPOLOGY: unknown 240 (ii) MOLECULE TYPE: cDNA 241 (iii) HYPOTHETICAL: NO 242 (iv) ANTI-SENSE: NO 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 256 (A) LENGTH: 28 base pairs 267 (i) SEQUENCE CHARACTERISTICS: 268 (A) LENGTH: 28 base pairs 260 (C) STRANDEDNESS: single 270 (D) TOPOLOGY: unknown 281 (III) HYPOTHETICAL: NO 282 (IV) ANTI-SENSE: NO 283 (IV) ANTI-SENSE: NO 284 (IV) ANTI-SENSE: NO 285 (IV) ANTI-SENSE: NO 286 (IV) ANTI-SENSE: NO 287 (IV) ANTI-SENSE: NO 288 (IV) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 289 (IV) ANTI-SENSE: NO 290 (IV) ANTI-SENSE: NO 291 (IV) ANTI-SENSE: NO 292 (IV) ANTI-SENSE: NO 293 (IV) ANTI-SENSE: NO 294 (IV) ANTI-SENSE: NO 295 (IV) ANTI-SENSE: NO 296 (IV) ANTI-SENSE: NO 297 (IV) ANTI-SENSE: NO 298 (IV) ANTI-SENSE: NO 299 (IV) ANTI-SENSE: NO 290 (IV) ANTI-SENSE: NO 290 (IV) ANTI-SENSE: NO 291 (IV) ANTI-SENSE: NO 292 (IV) ANTI-SENSE: NO 293 (IV) ANTI-SENSE: NO 294 (IV) ANTI-SENSE: NO 295 (IV) ANTI-SENSE: NO 296 (IV) ANTI-SENSE: NO 297 (IV) ANTI-SENSE: NO 298 (IV) ANTI-SENSE: NO 299 (IV) ANTI-SENSE: NO 290 (IV) ANTI-SENSE: NO 290 (IV) ANTI-SENSE: NO 290 (IV) ANTI-SENSE: NO 291 (IV) ANTI-SENSE: NO 291 (IV) ANTI-SENSE: NO 291 (IV) ANTI-SENSE: NO 292 (IV) ANTI-SENSE: NO 293 (IV) ANTI-SENSE: NO 296 (IV) ANTI-SENSE: NO 297 (IV) ANTI-SENSE: NO 298 (IV) ANTI-SENSE: NO 299 (IV) ANTI-SENSE: NO 290 (IV) ANTI-SENSE: NO 290 (IV) ANTI-SENSE: NO 291 (IV) ANTI-SENSE: NO 291 (IV) ANTI-SENSE: NO 291 (IV) ANTI-SENSE: NO 291 (IV) ANTI-SENSE: NO 297 (IV) ANTI-SENSE: NO 297 (IV) ANTI-SENSE: NO 297 (IV) ANTI-SENSE: NO 298 (IV) ANTI-SENSE: NO 299 (IV) ANTI-SENSE: NO 2 | 222 (2) INFORMATION FOR SEQ ID NO: 13: | |
| 225 (B) TYPE: nucleic acid 226 (C) STRANDEDNESS: single 227 (D) TOPOLOGY: unknown 228 (ii) MOLECULE TYPE: cDNA 229 (iii) HYPOTHETICAL: NO 230 (iv) ANTI-SENSE: NO 231 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13: 232 CCTCGGTACC TGCCACCATG GCGCGGATTC TTTAT 235 (I) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 239 (D) TOPOLOGY: unknown 240 (ii) MOLECULE TYPE: cDNA 241 (iii) HYPOTHETICAL: NO 242 (iv) ANTI-SENSE: NO 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | |
| 226 (C) STRANDEDNESS: single 227 (D) TOPOLOGY: unknown 228 (ii) MOLECULE TYPE: CDNA 229 (iii) HYPOTHETICAL: NO 230 (iv) ANTI-SENSE: NO 231 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13: 232 CCTCGGTACC TGCCACCATG GCGCGGATTC TTTAT 235 (1) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 239 (D) TOPOLOGY: unknown 240 (ii) MOLECULE TYPE: CDNA 241 (iii) HYPOTHETICAL: NO 242 (iv) ANTI-SENSE: NO 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | |
| 227 | | |
| 228 | • | |
| 111 | | |
| 230 | | |
| (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13: CCTCGGTACC TGCCACCATG GCGCGGATTC TTTAT 35 234 (2) INFORMATION FOR SEQ ID NO: 14: 235 | · · · | |
| CCTCGGTACC TGCCACCATG GCGCGGATTC TTTAT 234 (2) INFORMATION FOR SEQ ID NO: 14: 235 (i) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 239 (D) TOPOLOGY: unknown 240 (ii) MOLECULE TYPE: cDNA 241 (iii) HYPOTHETICAL: No 242 (iv) ANTI-SENSE: No 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | |
| 234 (2) INFORMATION FOR SEQ ID NO: 14: 235 (i) SEQUENCE CHARACTERISTICS: 236 (A) LENGTH: 38 base pairs 237 (B) TYPE: nucleic acid 238 (C) STRANDEDNESS: single 239 (D) TOPOLOGY: unknown 240 (ii) MOLECULE TYPE: cDNA 241 (iii) HYPOTHETICAL: No 242 (iv) ANTI-SENSE: No 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 38 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | 35 |
| (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 38 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: No (iv) ANTI-SENSE: No (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT (i) SEQUENCE CHARACTERISTICS: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 228 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single | | |
| (A) LENGTH: 38 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: No (iv) ANTI-SENSE: No (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: (CGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT (I) SEQUENCE CHARACTERISTICS: (I) SEQUENCE CHARACTERISTICS: (A) LENGTH: 228 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single | | |
| (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: No (iv) ANTI-SENSE: No (iv) ANTI-SENSE: No (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: (GGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT (I) SEQUENCE CHARACTERISTICS: (I) SEQUENCE CHARACTERISTICS: (A) LENGTH: 228 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single | · · | |
| (D) TOPOLOGY: unknown (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: No (iv) ANTI-SENSE: No (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT (i) SEQUENCE CHARACTERISTICS: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 228 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single | | |
| (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: No (iv) ANTI-SENSE: No (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT (i) SEQUENCE CHARACTERISTICS: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 228 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single | 238 (C) STRANDEDNESS: single | |
| 241 (iii) HYPOTHETICAL: No 242 (iv) ANTI-SENSE: No 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 38 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | |
| 242 (iv) ANTI-SENSE: NO 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | 240 (ii) MOLECULE TYPE: cDNA | |
| 243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 244 CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' | |
| CGGCATATGG CCTTAAGGCG CCCGCTTGTT CCTGAAGT 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | |
| 246 (2) INFORMATION FOR SEQ ID NO: 15: 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | 38 |
| 247 (i) SEQUENCE CHARACTERISTICS: 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | 30 |
| 248 (A) LENGTH: 228 base pairs 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | |
| 249 (B) TYPE: nucleic acid 250 (C) STRANDEDNESS: single | | |
| 250 (C) STRANDEDNESS: single | , , | |
| · | , , | |
| 251 (D) TOPOLOGY: unknown | · | |
| 252 (ii) MOLECULE TYPE: cDNA | | |

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/242,202B

DATE: 02/04/2002 TIME: 20:54:33

Input Set : N:\Crf3\01242002\I242202B.raw
Output Set: N:\CRF3\02042002\I242202B.raw

L:20 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:21 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:557 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=23 L:569 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=24